

# Case Report: Fire Needle Acupuncture for Knee Pain

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**Abstract :** *Knee pain is very common symptom that can affect all active adults and adolescents but it's most characteristic for people over 40 years old. The pain in the knee is very unpleasant, the patients can't walk normally, they have limited motion going up and down stairs and in sitting position the pain can be still present. According to Traditional Chinese Medicine (TCM) theory knee pain can be caused by blood stasis and collateral stagnation, disruption or imbalance of the life energy or invasion of external pathogens like wind and cold. The treated patient is 47 years old woman with pain on both knees, with the right knee more affected. Patient had this problem for more than a year. She was treated with fire needle acupuncture with duration of the treatment maximum 10 minutes. 5 treatments were made with acupuncture, once weekly. Fire needling as part of the Traditional Chinese Medicine gives positive results and is an effective treatment for knee pain.*

**Key word:** *knee, pain, traditional Chinese medicine, acupuncture, treatment*

## INTRODUCTION

The knee is the largest joint and its main function is to move the body, to bend and straighten, to support entire body or to perform some action. The knee relies on many structures including bones, tendons, ligaments and cartilage. [1] According to Traditional Chinese Medicine (TCM) knee pain is an impediment disease caused by invasion of wind, dampness and cold, deficiency and stagnation. [2] In TCM theory wind is reason for around hundred diseases, that causes havoc and moving the pain from joint to joint. Exterior pathogens like cold enter in the body and cause the most excruciating pain. [3] Aging according to TCM involves gradually reducing of vitality and vital substances, especially of the kidneys, which govern the health of the lower limbs, ankles, feet and also knees. During the treatment for knee pain, some patients are also treated for weakness of the kidney. When there are some changes in weather knee pain worsens and the external pathogenic factors like

cold or damp increases the pain. [4] In Chinese medicine as long as Qi and blood flow freely without obstruction there is no pain in muscles or joint. That lack of free flow can be caused by hindering or blocking the flow of Qi and blood through the channels and vessels, or there is insufficient Qi and blood. [5]

## CASE REPORT

The treated patient is a 47 years old woman with pain in the both knees, with the right knee more affected. Before coming to our clinic she had the problem for 1 year and all those months has been taking medicaments for pain like Ketonal and other similar drugs. She was also using Concor tablets and Glucophage for diabetes. Blood pressure was normal 120/70. On 17<sup>th</sup> December 2016 she has done knee puncture and from her knee was removed 20 ml liquid. In our clinic she has done 5 acupuncture treatments on the right knee and 3 treatments on left knee with fire needle which were sufficient to resolve the problem. Acupuncture treatments were done in a clinic for TCM and acupuncture in Skopje, by a doctor specialist in acupuncture. Fire needling was done on Ashi points, target points found on places where the pain is most dominant or where the place it is obviously inflamed. The duration of the treatment was 10-15 min including fire cupping 5-10 minutes after the acupuncture at the same Ashi points. For the fire needling was used sharp headed needle made of tungsten steel, which was heated by ethanol lamp and quickly inserted on the points and removed instantly. After the acupuncture was done cupping with round glass cup heated by ethanol lamp and put on the treated place.

## DISCUSSION

Our 47 old years patient came in our clinic with enormous pain especially in the right knee. The pain was so unbearable that she even couldn't stand standing for long time and she was climbing stairs very slowly. The patient has a work position where she must stand 8 hours and despite the drugs for

pain she felt pain again. The first three therapies we treated the lateral and medial side of the right knee only with fire needling and on the 3<sup>rd</sup> therapy we started to treat both knees and also used infrared lamp local on the knees for about 10 min. Treated points were found on palpation and were treated with direct needling with fire needle acupuncture five times on one trigger point. After the needling on the same points we put glass cup with vacuum to help all toxins and fluids that caused inflammation to go out of the body.

Knee pain is a common symptom, it may start suddenly after exercise or some injury. Knee pain can have many different causes like overweight, overusing the knee, medical conditions that cause pain like arthritis, Baker's cyst, infection in the bones of the knee, infection in the knee joint, Osgood-Schlatter disease etc. Knee pain may be located on different location: pain above the knee (quadriceps tendon or swelling), pain below (Osgood-Schlatter disease), pain behind (Baker's cyst or arthritis), pain in front (bursitis arthritis, chondromalacia patella, patella tracking) and pain inside or outside the knee (meniscus or collateral ligament, tears and arthritis). [6] Except knee pain, sometimes patients have other symptoms like swelling, stiffness, weakness, redness, feeling

warmth on touch, sensitivity on cold weather, difficulties with walking, inability to climb stairs and maintaining balance. [7] Acupuncture as part of TCM works in three ways. First helps to increase the circulation in the painful area with removing all the toxins and fluids that are result of inflammation, healing with increased supply of oxygen and fast repair of the tissue. Second, acupuncture helps to relax painful trigger points in the muscles and relax the tension in the muscles fibers. As third, acupuncture helps to relieve the pain naturally, by the body's own healing processes. [8] Fire needle technique is highly effective for treating arthritis, sports injuries, tendonitis and is a fast and effective way for healing. Fire needle acupuncture improves blood circulation, reduces inflammation, eliminates calcifications and contractures, eliminates cold and dampness and relieves pain. When applying fire needle acupuncture technique, a specialized needle is heated and immediately inserted into painful points in a swift motion ((because the duration of high temperature is short) and then removed instantly. [9] Fire needling usually goes in combination with cupping. Suction can be created by inverted cup which is placed over a small flame. [10] Cupping therapy helps to stimulate local circulation of Qi and blood, resolves tension, swelling and pain in the treated area. [11]



*Figure 1. Ashi points on the outside side of the knee*



*Figure 2. Insertion of the fire needle*

On figure 1 and figure 2 is shown the procedure of inserting the fire needle during the treatment. Treated points were selected depending on the location of the pain. These treated points are called Ashi points. An Ashi point produces an unexpected pain for the patient, which can be unexpected in intensity or instant and causes weakness of the muscles of the entire body. [12]

## **CONCLUSION**

Fire needle acupuncture as part of TCM is a highly effective technique in the treatment of knee pain which gives positive results and relieves the pain for a very short time.

## **REFERENCES**

1. Shiel C.W.; Knee Pain; 2016 [www.emedicinehealth.com]
2. Hou W.P., Fu P.K., Hsu H.C., Hsieh C.L.; Traditional Chinese medicine in patients with osteoarthritis of the knee; J Tradit Complement Med. 2015 Oct; 5(4): 182–196.
3. Kent K.; Traditional Chinese Medicine for Stiff and Aching Joints; 2017 [www.vitalitymagazine.com]
4. Matesz D.; Chronic Knee Pain; 2013 [www.barefoot-acupuncture.com]
5. Benjamin C.; Knee Pain; 2014 [www.medlineplus.gov]
6. Shi R.; Pain According to Chinese Medicine; 2017 [www.reishiacupuncture.com]
7. Brown T.A.; Knee Pain Treatment - Using Acupuncture And Chinese Herbs; 2013 [www.jamaica-gleaner.com]
8. Benhuri R.; 3 Ways Acupuncture Helps Reduce Knee Pain; 2014 [hwww.cityacu.net]
9. Healthcare Medicine Institute; Acupuncture Alleviates Knee Osteoarthritis; 2016 [www.healthcmi.com]
10. Rushall K.; The Many Benefits of Chinese Cupping; 2017 [www.pacificcollege.edu]
11. Guarneri M., Oberg E., Casco A.M., Balentine J.R.; Cupping Therapy; 2016 [www.medicinenet.com]
12. Nugent-Head A.; Ashi Points in Clinical Practice; Journal of Chinese Medicine; Number 101; February 2013